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File 266:FEDRIP 2005/Dec  
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Set	Items	Description
S1	0	GRADIENT? AND PIXEL? AND CONTOUR AND (ROAD OR SURFACE OR STREET) AND CAMERA?
S2	2	PIXEL? AND CONTOUR? AND (ROAD OR SURFACE OR STREET) AND CAMERA? AND (GRADIENT? OR SLOPE)
S3	9	PIXEL? AND (CURV? OR CONTOUR?) AND (ROAD OR SURFACE OR STREET) AND CAMERA? AND (GRADIENT? OR SLOPE)
S4	7	RD (unique items)

T S2/3,KWIC/1-2

2/3,KWIC/1 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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Cite

1937442 NTIS Accession Number: AD-D017 711/3

**Method and Apparatus for Noncontact Surface Contour Measurement**  
(Patent)

Mazumder, J. ; Voelkel, D. D.

Department of the Navy, Washington, DC.

Corp. Source Codes: 001840000; 110050

Report No.: PAT-APPL-8-004 763; PATENT-5 446 549

Filed 14 Jan 93 patented 29 Aug 95 24p

Languages: English Document Type: Patent

Journal Announcement: GRAI9609

Supersedes PAT-APPL-8-004 763.

This Government-owned invention available for U.S. licensing and, possibly, for foreign licensing. Copy of patent available Commissioner of Patents, Washington, DC 20231.

NTIS Prices: Not available NTIS

**Method and Apparatus for Noncontact Surface Contour Measurement**

Light at known angles is impinged onto an object whose contour is to be measured and a camera is used to receive the reflected light which is then recorded. A computer processes the images mathematically manipulating them so that surface slopes are known. The slopes are then integrated to obtain local elevations which represent the object contour. (MM).

Descriptors: \*Reflection; \*Light transmission; \*Patents; \*Contours ; Fiber optics; Image processing; Laser beams; Surfaces; Cameras ; Slope ; Pixels ; Glare

2/3,KWIC/2 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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A

07229205 E.I. No: EIP05038797798

**Title: Three-dimensional profile measurement of objects with spatially isolated surfaces by modified temporal phase unwrapping**

Author: Tian, Ailing; Tomoaki, Makihata; Mitsuo, Takeda; Jiang, Zhuangde

Corporate Source: Lab. for Mfg. Syst. Eng. Xi'an Jiaotong Univ., Xi'an 710049, China

Source: Hsi-An Chiao Tung Ta Hsueh/Journal of Xi'an Jiaotong University v 38 n 11 November 2004. p 1196-1198

Publication Year: 2004

CODEN: HCTPDW ISSN: 0253-987X

Language: Chinese

...Abstract: and the temporal variation of the fringe signal is recorded with charge coupled device (CCD) camera. The phase of the temporal fringe signal is detected at each pixel by Fourier transform method, and is temporally phase unwrapped, independently from other pixels. The temporal frequency of the fringe signal estimated from the time slope of the unwrapped phase provides the information of the absolute surface heights of the objects. The measurement technique of objects with large discontinuities and spatially isolated...

Descriptors: \*Contour measurement; Fourier transforms; Three dimensional; Charge coupled devices

?

**4/3/1 (Item 1 from file: 6)**

DIALOG(R)File 6:NTIS

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1937442 NTIS Accession Number: AD-D017 711/3

**Method and Apparatus for Noncontact Surface Contour Measurement  
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Report No.: PAT-APPL-8-004 763; PATENT-5 446 549

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Languages: English Document Type: Patent

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Supersedes PAT-APPL-8-004 763.

This Government-owned invention available for U.S. licensing and, possibly, for foreign licensing. Copy of patent available Commissioner of Patents, Washington, DC 20231.

NTIS Prices: Not available NTIS

**4/3/2 (Item 1 from file: 8)**

DIALOG(R)File 8:Ei Compendex(R)

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07313418 E.I. No: EIP05129003043

**Title: Photogrammetry: A powerful tool for geometric analysis of solar concentrators and their components**

Author: Pottler, Klaus; Lupfert, Eckhard; Johnston, Glen H. G.; Shortis, Mark R.

Corporate Source: German Aerospace Center (DLR) Inst. of Technical Thermodynamics Plataforma Solar de Almeria, Tabernas, 04200, Spain

Source: Journal of Solar Energy Engineering, Transactions of the ASME v 127 n 1 February 2005. p 94-101

Publication Year: 2005

CODEN: JSEEDO ISSN: 0199-6231

Language: English

**4/3/3 (Item 2 from file: 8)**

DIALOG(R)File 8:Ei Compendex(R)

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07229205 E.I. No: EIP05038797798

**Title: Three-dimensional profile measurement of objects with spatially isolated surfaces by modified temporal phase unwrapping**

Author: Tian, Ailing; Tomoaki, Makihata; Mitsuo, Takeda; Jiang, Zhuangde

Corporate Source: Lab. for Mfg. Syst. Eng. Xi'an Jiaotong Univ., Xi'an 710049, China

Source: Hsi-An Chiao Tung Ta Hsueh/Journal of Xi'an Jiaotong University v 38 n 11 November 2004. p 1196-1198

Publication Year: 2004

CODEN: HCTPDW ISSN: 0253-987X

Language: Chinese

**4/3/4 (Item 3 from file: 8)**

DIALOG(R)File 8:Ei Compendex(R)

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07028867 E.I. No: EIP04388367767

**Title: Lane boundary detection using an adaptive randomized Hough transform**

Author: Li, Qing; Zheng, Nanning; Cheng, Hong

Corporate Source: Inst. of Artif. Intell. and Robotics Xi'an Jiaotong University, Xi'an 710049, China

Conference Title: WCICA 2004 - Fifth World Congress on Intelligent Control and Automation, Conference Proceedings

Conference Location: Hangzhou, China Conference Date: 20040615-20040619

E.I. Conference No.: 63444

Source: Proceedings of the World Congress on Intelligent Control and Automation (WCICA) WCICA 2004 - Fifth World Congress on Intelligent Control and Automation, Conference Proceedings v 5 2004.

Publication Year: 2004

Language: English

**4/3/5 (Item 4 from file: 8)**

DIALOG(R)File 8:EI Compendex(R)

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06575009 E.I. No: EIP03437687912

**Title: Comparison of ISOPHOT, DIRBE and IRAS FIR maps in regions of faint cirrus emission**

Author: Juvela, M.; Mattila, K.; Lemke, D.

Corporate Source: Helsinki University Observatory University of Helsinki, Helsinki SF-00014, Finland

Conference Title: The Calibration Legacy of the ISO Mission

Conference Location: madrid, Spain Conference Date: 20010205-20010209

E.I. Conference No.: 61580

Source: European Space Agency, (Special Publication) ESA SP n 481 May 2003. p 179-182

Publication Year: 2003

CODEN: ESPUD4 ISSN: 0379-6566

Language: English

**4/3/6 (Item 5 from file: 8)**

DIALOG(R)File 8:EI Compendex(R)

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05759354 E.I. No: EIP01015486905

**Title: Investigations of the influence of oxygen on the surface tension of zirconium by the oscillating drop technique**

Author: Roesner-Kuhn, M.; Hofmeister, W.H.; Kuppermann, G.; Bayuzick, R.J.; Froberg, M.G.

Corporate Source: Technical Univ of Berlin, Berlin, Ger

Source: Surface Science v 443 n 3 Dec 1999. p 159-164

Publication Year: 1999

CODEN: SUSCAS ISSN: 0039-6028

Language: English

**4/3/7 (Item 6 from file: 8)**

DIALOG(R)File 8:EI Compendex(R)

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02837133 E.I. Monthly No: EIM8912-048380

**Title: Shape understanding from Lambertian photometric flow fields.**

Author: Wolff, Lawrence B.

Corporate Source: Columbia Univ, New York, NY, USA  
Conference Title: Proceedings: IEEE Computer Society Conference on  
Computer Vision and Pattern Recognition  
Conference Location: Rosemont, IL, USA Conference Date: 19890606  
E.I. Conference No.: 12468  
Source: Proc IEEE Comput Soc Conf Comput Vision Pattern Recognit. Publ by  
IEEE, IEEE Service Center, Piscataway, NJ, USA. Available from IEEE Service  
Cent (cat n 89CH2724-3), Piscataway, NJ, USA. p 46-52  
Publication Year: 1989  
Language: English

## Refine Search

### Search Results -

Terms	Documents
L35 AND L30	0

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
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L36

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### Search History

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*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES;  
 OP=OR*

L36 L35 AND L30

0 L36

L35 L11 OR L32 OR L34

144 L35

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

L34

(5579441 | 4839822 | 5094609 | 4875165 | 5995109 | 5155343 | 5739518 |  
 4874936 | 5764306 | 5839440 | 5544291 | 4800432 | 5163126 | 5848198 |  
 5608466 | 5243655 | 5392385 | 5495297 | 5066120 | 5100232 | 5881171 |  
 5080839 | 5373147 | 5233670 | 5438654 | 5539475 | 5668893 | 5886703 |  
 5173739 | 5081685 | 5324923 | 4998010 | 5594853 | 4499598 | 4817184 |  
 5410644 | 5416529 | 5276315 | 4798460 | 4488169 | 5790701 | 5376780 |  
 4951144 | 5007734 | 5870105 | 5343559 | 4916298 | 4463372 | 5621872 |  
 5319181 | 5241166 | 5777309 | 5052044 | 5063375 | 5619626 | 4275413 |  
 5124537 | 4817166 | 5428401 | 5073955 | 5974521 | 5253065 | 5454068 |  
 5709206 | 5031227 | 4598420 | 5781667 | 5301267 | 3588823 | 5268735 |  
 6124858 | 5719967 | 5854478 | 5189292)! [PN]

74 L34

*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR*

<u>L33</u>	('US 6424430B'   '6097839'   '6313840'   'US 6097839A'   '6460127'   '5717781'   '4910786'   '6501848'   '6424430'   '6128046'   'US 4910786A') [ABPN1,NRPN,PN,TBAN,WKU]	1952414	<u>L33</u>
<u>L32</u>	('US 6424430B'   '6097839'   '6313840'   'US 6097839A'   '6460127'   '5717781'   '4910786'   '6501848'   '6424430'   '6128046'   'US 4910786A')[URPN]	63	<u>L32</u>
<u>L31</u>	L30 OR 6424430.PN. OR 6097839.PN. OR 4910786.PN.	11	<u>L31</u>
<u>L30</u>	L28 or L29	8	<u>L30</u>
<u>L29</u>	L26 and @pd<=20000414	2	<u>L29</u>
<u>L28</u>	L26 and @ad<=20000414	8	<u>L28</u>
<u>L27</u>	L26 and @ad<=000414	0	<u>L27</u>
<u>L26</u>	(curv\$ same (road\$ or street\$ or path\$) same (determin\$ or estimat\$)) and (gradient\$ near3 pixel\$)	47	<u>L26</u>
<u>L25</u>	L24 and qualit\$	15	<u>L25</u>
<u>L24</u>	L21 and 701/120.ccls.	42	<u>L24</u>
<u>L23</u>	L22 and (qualit\$ and indicat\$) and (index\$ or indices)	1	<u>L23</u>
<u>L22</u>	L21 and l4	1	<u>L22</u>
<u>L21</u>	l17 or l18 or l20	135	<u>L21</u>

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

<u>L20</u>	(3534367   3872474   6006158   5574648   3737902   5216611   3614728   5740047   4197536   3159831   2514436   4719467   3623090   5670961   3803602   4179695   5913912   5075680   3868497   2972742   4196474   3747097   4319243   5189425   3808598   3310806   3870994   4516125   4979137   3766552   3668403   5623413   4213126)! [PN]	33	<u>L20</u>
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*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR*

<u>L19</u>	('US 6278965B'   'US 5300933A'   '6278965'   '5300933'   '4196474'   '4706198'   'US 6161097A') [ABPN1,NRPN,PN,TBAN,WKU]	1952408	<u>L19</u>
<u>L18</u>	('US 6278965B'   'US 5300933A'   '6278965'   '5300933'   '4196474'   '4706198'   'US 6161097A') [URPN]	100	<u>L18</u>
<u>L17</u>	L16 or 5300933.pn. or 6278965.pn.	7	<u>L17</u>
<u>L16</u>	L12 and (qualit\$ and indicat\$) and (index\$ or indices)	2	<u>L16</u>
<u>L15</u>	L12 and (qualit\$ same indicat\$) and (index\$ or indices)	1	<u>L15</u>
<u>L14</u>	L12 and (qualit\$ with indicat\$) and (index\$ or indices)	1	<u>L14</u>
<u>L13</u>	L12 and l4	1	<u>L13</u>
<u>L12</u>	l8 or l10 or l11	52	<u>L12</u>

*DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR*

<u>L11</u>	(3808598   3803602   3310806   3737902   3623090   3614728   3766552   3668403)! [PN]	8	<u>L11</u>
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*DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR*

<u>L10</u>	('4196474') [ABPN1,NRPN,PN,TBAN,WKU]	2	<u>L10</u>
<u>L9</u>	l5	1	<u>L9</u>



<u>L8</u>	('4196474')[URPN]	42	<u>L8</u>
<u>L7</u>	L5 and ((index or indices) and (quality with indicat\$))	0	<u>L7</u>
<u>L6</u>	L5 and ((index or indices) same (quality with indicat\$))	0	<u>L6</u>
<u>L5</u>	L4 and (701/120-122.ccls.)	1	<u>L5</u>
<u>L4</u>	l1 or L3	2872	<u>L4</u>
<u>L3</u>	(qualit\$ with indicat\$) and (index\$ or indices) and air\$ and @pd<=20020313 <i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR</i>	1418	<u>L3</u>
<u>L2</u>	(qualit\$ with indicat\$) and (index\$ or indices) and air\$ and @pd<=20020313 <i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR</i>	1545	<u>L2</u>
<u>L1</u>	(qualit\$ with indicat\$) and (index\$ or indices) and air\$ and @ad<=20020313	2615	<u>L1</u>

END OF SEARCH HISTORY

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**Search Results** - Record(s) 1 through 10 of 11 returned.

☐ 1. Document ID: US 6501848 B1

L31: Entry 1 of 11

File: USPT

Dec 31, 2002

US-PAT-NO: 6501848

DOCUMENT-IDENTIFIER: US 6501848 B1

TITLE: Method and apparatus for three-dimensional reconstruction of coronary vessels from angiographic images and analytical techniques applied thereto

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw De
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☐ 2. Document ID: US 6460127 B1

L31: Entry 2 of 11

File: USPT

Oct 1, 2002

US-PAT-NO: 6460127

DOCUMENT-IDENTIFIER: US 6460127 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Apparatus and method for signal processing

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw De
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☐ 3. Document ID: US 6424430 B1

L31: Entry 3 of 11

File: USPT

Jul 23, 2002

US-PAT-NO: 6424430

DOCUMENT-IDENTIFIER: US 6424430 B1

**\*\* See image for Certificate of Correction \*\***

TITLE: Rendering of objects on graphical rendering devices as clipped images

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWMC	Draw De
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☐ 4. Document ID: US 6313840 B1

L31: Entry 4 of 11

File: USPT

Nov 6, 2001

US-PAT-NO: 6313840

DOCUMENT-IDENTIFIER: US 6313840 B1

TITLE: Smooth shading of objects on display devices

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 5. Document ID: US 6128046 A

L31: Entry 5 of 11

File: USPT

Oct 3, 2000

US-PAT-NO: 6128046

DOCUMENT-IDENTIFIER: US 6128046 A

TITLE: Key signal generating apparatus and picture synthesis apparatus, and key signal generating method and picture synthesis method

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 6. Document ID: US 6097839 A

L31: Entry 6 of 11

File: USPT

Aug 1, 2000

US-PAT-NO: 6097839

DOCUMENT-IDENTIFIER: US 6097839 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Method and apparatus for automatic discriminating and locating patterns such as finder patterns, or portions thereof, in machine-readable symbols

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 7. Document ID: US 5717781 A

L31: Entry 7 of 11

File: USPT

Feb 10, 1998

US-PAT-NO: 5717781

DOCUMENT-IDENTIFIER: US 5717781 A

TITLE: Ophthalmic lens inspection method and apparatus

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 8. Document ID: US 4910786 A

L31: Entry 8 of 11

File: USPT

Mar 20, 1990

US-PAT-NO: 4910786

DOCUMENT-IDENTIFIER: US 4910786 A

TITLE: Method of detecting intensity edge paths

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 9. Document ID: US 6424430 B1

L31: Entry 9 of 11

File: DWPI

Jul 23, 2002

DERWENT-ACC-NO: 2002-672976

DERWENT-WEEK: 200272

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TITLE: Graphical object rendering method involves extending color borders associated at edges of rendered image

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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☐ 10. Document ID: US 6097839 A

L31: Entry 10 of 11

File: DWPI

Aug 1, 2000

DERWENT-ACC-NO: 2000-654984

DERWENT-WEEK: 200063

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TITLE: Geometric figure identification method for computer based symbol recognition, involves selecting patterns relevant to identified distortion compensated pixels and matching with geometric figures

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw. De
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Terms	Documents
L30 OR 6424430.PN. OR 6097839.PN. OR 4910786.PN.	11

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**Search Results** - Record(s) 11 through 11 of 11 returned.

☐ 11. Document ID: US 4910786 A

L31: Entry 11 of 11

File: DWPI

Mar 20, 1990

DERWENT-ACC-NO: 1990-132012

DERWENT-WEEK: 199017

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TITLE: Intensity edge path detection method - determining gradient magnitude and image direction in node point array using gaussian weighted gradient operator

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawings
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